

Chapter 10: Disaster Recovery Procedures

D. Large Incident Books Not Printed on Coated Paper

Large incidents involve more than 500 books or more than 50 linear feet of archival materials. Under these circumstances there is usually structural damage or mechanical failure in a building. **Make sure that all safety procedures are followed.** Causes of large-scale incidents include natural disasters such as tornadoes, hurricanes, floods, and earthquakes. Fire can also cause a disaster on this scale. Outside help is almost always required for salvage, recovery and clean-up.

A Recovery Director and Team should have already been designated. The Director will assemble the Recovery Team. A five-person Team usually works well. The Team should be comprised of:

Recovery Director/Coordinator: This person must be a member of your staff. Familiarity with the collections, the physical plant, etc. is important. This person gathers the team, handles the publicity, communications and the media.

Supply Coordinator: This person gathers and distributes supplies; monitors the inventory of supplies during the recovery process.

Training Instructor: This person trains and supervises staff and volunteers in the proper procedures during the recovery. Volunteers always have the best intentions but can cause more damage than the actual disaster.

Scheduler: This person schedules the various recovery teams: removing, sorting, packing, loading; makes sure that one team does not outpace another; schedules breaks and replacements.

Trouble-shooter: This person assists all of the above, assuring smooth work flow and preventing bottlenecks.

The Recovery Director will activate plans for supplies, staff and/or experts, and volunteers. **AUTHORIZATION TO SPEND MONEY SHOULD BE SECURED AHEAD OF TIME.** By getting word of a disaster out immediately, through the media, you may be able to enlist the aid of volunteers in the recovery effort. Companies may also donate needed supplies and storage space. The following are steps to be taken in the event of a large incident:

1. Disaster is reported to the staff.
2. Building is evacuated, if necessary.
3. Appropriate sections of the disaster plan are implemented.

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4. The five-member Recovery team visits the site to determine the extent of the damage--if possible take photographs of the disaster area. A structural engineer or someone from the Safety Office will be required to determine whether or not the building is safe to occupy. **In cases of fire, you may not enter the building until clearance is received from the Fire Marshall.** You may not be able to enter the building. You may have to contract with a salvage company to have the damaged materials removed. Remember that people are more important than books.
5. Once clearance is received, steps should be taken to correct the problem. Plan to work closely with the Plant Operations/Maintenance staff. Your insurance company should be contacted before you begin the recovery efforts. You should take photographs of the disaster area, if possible. Also take photographs throughout the recovery process. It is a good idea to have already taken up-to-date photographs of your facility before the disaster strikes. These should be stored in a location off-site, so they aren't destroyed in the disaster!
6. Senior administrative staff should decide whether or not the institution needs to be closed. Set up a central location for communications. **Remember that some people may be in shock and that communications may be difficult.**
7. Once the extent of the damage is discovered, each member of the Recovery Team will begin to coordinate their responsibilities. Plot your strategy, think everything through before you start. Planning at this stage pays off later. ***Do not be hasty.***
8. Additional staff are alerted and scheduled as needed. Try to prevent all the staff showing up at once. Establish teams for the different jobs, e.g. sorting the damaged items. Staff will need to be scheduled in shifts. If volunteers are used, past experience indicates that their enthusiasm will last about 72 hours.
9. People are dispatched to purchase supplies. Call the suppliers to confirm availability prior to dispatching the staff to avoid frustration and wasted time. Estimates for quantities needed can be difficult to make. **In helping you estimate the size of the disaster and the supplies needed, the rule of thumb is 15 books to the cubic foot.** This number will be slightly lower if the volumes are mostly bound journals. Also, a full letter-sized file drawer equals two cubic feet, a legal-sized drawer contains approximately three cubic feet.
10. Work areas are arranged and prepared. Tables should be covered with plastic sheeting or blotters. Staff are trained for their different jobs. Throughout the recovery process work should be monitored to insure that items are being handled properly. It may be necessary to make some adjustments to procedures or staffing.

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11. Establish a semblance of order in the disaster area. If necessary, turn off the electricity, clear the aisles of debris, pump out standing water. Cordon off hazardous areas.
12. Stabilize the environment. Use dehumidifiers or other equipment appropriate to the type of disaster. Try to maintain a temperature of less than 65 degrees. Turn off the heat or turn on the air-conditioning system if possible. Use fans to increase air circulation. If necessary, establish a *moisture barrier* by hanging plastic sheeting to confine high humidity to the disaster area.
13. Salvage those areas that you have identified as your highest priorities first. Also, pay attention to those items that are the most severely damaged.
14. If you do not have to hire a salvage company to remove your damaged items, staff can start removing items from the disaster area. **People handling materials should wear protective clothing. Gloves, aprons and respirators should be provided. Make sure that all safety procedures are followed.** It may not be possible to pack boxes onsite, due to the narrowness of aisles. Human chains may need to be used to get books to a more spacious packing area. Handle the material as little as possible. **Fatigue can lead to improper handling, so make sure people take frequent breaks.**
15. A disaster of this magnitude will probably be beyond your institution's ability to cope. You will most likely have to contract out some stages of the recovery process. This can be as limited as renting commercial freezer space or up to and including having the books packed, dried, cleaned, replaced on shelves, etc. by an outside concern. Ask lots of questions. No one will think you are stupid. For example, if you are renting freezer space, you will want to know: At what times will you have access to your material? Will your material be stored in its own freezer or merely in a large warehouse? Who else has access to the freezer area? How cold is the freezer area? etc.
16. Sort the damaged items. Different media may require different salvage procedures. (See Special Media, p. 10E.1.) Also, any items that are not going to be salvaged should be segregated, i.e. do not waste time with the current local phone book. Make sure that wet books stay with other wet books. Do not mix wet books with dry books.
17. Ideally, items to be frozen should be wrapped so they do not stick together. They may be wrapped in freezer paper, waxed paper, silicone paper, or plastic bags. Take a piece of paper and fold it around the book. **It does not have to be wrapped tightly like a present.** Sheets pre-cut to a uniform size will speed up the process. In a disaster of this size, it may not be possible to wrap even every other book. It is more important to get the damaged items packed and frozen, than to have them wrapped.

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18. Books should be packed in cardboard boxes (12 x 18 x 12) or in plastic milk crates. Boxes should not be larger than one and a half cubic feet. Wet books are quite heavy and their weight can destroy a cardboard box. A box of one and a half cubic feet, filled with wet institution materials will weigh about 75 pounds.
19. Wet books should be packed spine down. Usually one layer of books is enough for each box. The boxes should never be more than 70% full. Do not pack the boxes too tightly, the items will continue to swell after they are packed. If there has been a delay in getting the items to a freezer, the freezing process can be facilitated by placing dry ice on top of the packing containers.
20. Boxes should be numbered and labeled **with waterproof ink**. Information included on the box should include classification numbers, the range items were taken from, general estimate of amount of damage, priority for salvage and the destination of the material if it is going to an off-site location.
21. Never place a carton of wet books on the floor, as it may be impossible to get it off the floor without causing further damage. Boxes, prior to freezing, should always be placed on *pallets*. It is best not to stack the boxes because they can collapse and cause further damage. If the boxes must be stacked, do not stack them higher than three cartons. Shrink-wrapping the stacked boxes will limit damage when they are moved.
22. Air dry only those materials that cannot be frozen. (See Special Media, p. 10E.1.) **Mold will begin to grow within 72 hours**. Materials that can't be frozen should be dealt with within the 72 hour time period or they could be severely damaged.
23. The recovery process can take months, if not years. Good communications are essential to the recovery process. The Director of the recovery operations needs to communicate with the administration, the public and the staff. Keep them up to date on progress and any problems.
24. It is necessary to control the environment of the drying area. A relative humidity between 40-55% is best. Fans and dehumidifiers may be required. Wet trash should be removed periodically from the recovery area. Also, the person monitoring the drying process should check frequently for mold growth.
25. Since things are in such a state of flux, the security of the work area and the items in it needs to be strict. The area should be capable of being locked. Access to the work area should be limited to recovery personnel.
26. After the recovery process has been completed, check the disaster area again. Make sure that all damaged items are found.

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27. Have area affected by disaster cleared.
28. Make decisions on rebinding, repairs, and, if necessary, replacement. If books are returned to the shelf without having any repair work done, an institution may want to initiate repairs when a patron complains about a specific item. Protective enclosures such as *phase boxes* may be the most cost-effective use of repair money.
29. Return books to shelves. After vacuum drying, a book will be drier than it should be, and consequently will be easily damaged. The books should be allowed to absorb moisture from the air. This is a lengthy process. It may take as long as six months.
30. Discuss disaster recovery operations with staff. Where did the plan fail to function well? Are there possible modifications to the plan?
31. Periodically check the affected area to make sure that there is no mold growth. Books that have been moldy will always be susceptible to mold growth.
32. Replace disaster recovery supplies used during the incident.
33. Gather all paperwork. File insurance claims. Write reports, etc.